

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 12181751/ARS	<b>FOR FURTHER ACTION</b>	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416).
International Application No.  <b>PCT/AU2003/001370</b>	International Filing Date (day/month/year)  16 October 2003	Priority Date (day/month/year)  17 October 2002
International Patent Classification (IPC) or national classification and IPC  Int. Cl. <sup>7</sup> C05F 9/02, 3/04, 17/02, C02F 11/02, A01K 67/033		
Applicant  VERMITECH LIMITED et al		

1.	This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of 3 sheets, including this cover sheet.  <input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  These annexes consist of a total of    sheet(s).
3.	This report contains indications relating to the following items:  <div style="margin-left: 20px;">           I    <input checked="" type="checkbox"/> Basis of the report            II    <input type="checkbox"/> Priority            III    <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability            IV    <input type="checkbox"/> Lack of unity of invention            V    <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement            VI    <input type="checkbox"/> Certain documents cited            VII    <input type="checkbox"/> Certain defects in the international application            VIII    <input type="checkbox"/> Certain observations on the international application         </div>

Date of submission of the demand 13 May 2004	Date of completion of the report 2 July 2004
Name and mailing address of the IPEA/AU  AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer   <b>M. BREMERS</b> Telephone No. (02) 6283 2052

**I. Basis of the report****1. With regard to the elements of the international application:\***

- ☒ the international application as originally filed.
- ☐ the description, pages , as originally filed,  
pages , filed with the demand,  
pages , received on with the letter of
- ☐ the claims, pages , as originally filed,  
pages , as amended (together with any statement) under Article 19,  
pages , filed with the demand,  
pages , received on with the letter of
- ☐ the drawings, pages , as originally filed,  
pages , filed with the demand,  
pages , received on with the letter of
- ☐ the sequence listing part of the description:  
pages , as originally filed  
pages , filed with the demand  
pages , received on with the letter of

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**

These elements were available or furnished to this Authority in the following language which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:**

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

**4. ☐ The amendments have resulted in the cancellation of:**

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/fig.

**5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\***

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims 1-15	YES
	Claims	NO
Inventive step (IS)	Claims 1-15	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-15	YES
	Claims	NO

**2. Citations and explanations (Rule 70.7)**

D1: WO 99/51545 A (VERMITECH PTY LTD) 14 October 1999  
Figure 31 and page 14 lines 1-11

D2: AU 199894187 A (MARKETING AND PURCHASING ADVISORY PTY LTD)  
17 June 1999), Figures 9 and 10, page 14 line 21 to page 15 line 23

D3: US 5527373 A (CHAREYRE) 18 June 1996  
Claims 5, 9, 11 and Figures 1 and 2

D4: EP 196887 A (NATIONAL RESEARCH DEVELOP CORPORATION) 8 October 1986  
Figure 13 and page 13 lines 4-6

D5: EP 887328 A (TAYLOR et al) 30 December 1998  
Abstract

These documents disclose vermiculture apparatuses wherein the castings are harvested from the underside of the bed and the castings fall onto a conveyor belt for removal. None of these documents disclose the particular type of belt as defined in claim 1. Therefore the claims are novel. Furthermore, the claims are considered to be inventive because the type of belt defined in claim 1 has advantages over the endless conveyors that are used in the prior art. These advantages include light weight, simplicity and economical use of space.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/01370

**A. CLASSIFICATION OF SUBJECT MATTER**Int. Cl. <sup>7</sup>: C05F 9/02, 3/04, 17/02, C02F 11/02, A01K 67/033

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI: C05F, C02B, C02F, B09B, A01K 67/- and keywords: worm, harvest, belt and similar terms.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99/51545 A (VERMITECH PTY LTD) 14 October 1999 Figure 31 and page 14 lines 1-11	1-15
X	AU 199894187 A (MARKETING AND PURCHASING ADVISORY PTY LTD) 17 June 1999, Figures 9 and 10, page 14 line 21 to page 15 line 23	1-15
X	US 5527373 A (CHAREYRE) 18 June 1996 Claims 5, 9, 11 and Figures 1 and 2	1-15

☒ Further documents are listed in the continuation of Box C☒ See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
5 November 2003Date of mailing of the international search report  
12 NOV 2003Name and mailing address of the ISA/AU  
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## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/AU03/01370

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 196887 A (NATIONAL RESEARCH DEVELOP CORPORATION) 8 October 1986, Figure 13 and page 13 lines 4-6	1-15
X	EP 887328 A (TAYLOR et al) 30 December 1998 Abstract	1-15

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/AU03/01370**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member	
WO 9951545	AU 31294/99	EP 1070030	US 6548294
AU 94187/98			
US 5527373	CA 2028333	EP 0425397	FR 2653687
	JP 3183679		
EP 0196887	GB 2174079		
EP 0887328	GB 2326638		
END OF ANNEX			